

FASEB Summer Research Conference
Copper Mountain, Colorado
July 30, 1989 - August 4, 1989

Nutrients, Gene Expression, and Cancer

SPEAKER/ADDRESS

TITLE

Session I. Monday 9:00-12:00 a.m. Gene Expression and Cancer--Perspectives

- | | |
|--|---|
| 1. Janet D. Rowley, Chairperson
Department of Medicine and
Molecular Genetics
Box 420 University of Chicago
5841 S. Maryland Avenue
Chicago, IL 60637
(217) 702-6117 | Genetic Changes in Colon
Cancer Cells |
| 2. Thomas A. Waldman*
Building 10, Room 4N115, NCI
National Institutes of Health
Bethesda, MD 20014
(301) 496-6653 | The Multichain IL-2 Receptor
Complex in the Control of
Normal and Malignant T-Cell
Proliferation |
| 3. Timothy Osborne
University of Texas Health
Science Center
Dallas, TX 75235
(214) 688-2141 | Coordinate Control of
Genes Involved in
Uptake and Biosynthesis
of Cholesterol |
| 4. Bruce N. Ames
Department of Biochemistry
University of California
Berkeley, CA 94720
(415) 642-5165 | Measuring and Inhibiting
Damage in Individual People |

Session II. Monday 7:30-10:30 p.m. Calories, Fat, and Gene Expression

- | | |
|--|--|
| 1. Ronald W. Hart, Chairperson
National Center for Toxicological
Research
Jefferson, AR 72079
(501) 541-4517 | The Role of Caloric
Restriction DNA Repair and
Gene Expression |
| 2. Ronald W. Estabrook
Department of Biochemistry
The University of Texas Health
Science Center of Dallas
5323 Harry Hines Blvd.
Dallas, TX 75235
(214) 688-3456 | Dietary Modulation of
Cytochrome P450 and Its
Consequences |

*Since agreeing to speak at this conference, Dr. Waldman has found it necessary that he attend the 7th International Congress on Immunology scheduled during the week of our conference. He and others are helping us choose another speaker.

- | | |
|---|--|
| <p>3. David L. Busbee
Professor of Veterinary Physiology
Pharmacology
Texas A & M University
College Station, TX 77843-486
(713) 845-7261</p> | <p>Fidelity and Non-Fidelity of
DNA Polymerization as a
Consequence of Caloric
Restriction</p> |
| <p>4. Kurt Randerath
Department of Pharmacology
Baylor College of Medicine
Texas Medical Center
Houston, TX 77030
(713) 798-4465</p> | <p>Effects of Diet Composition
and Caloric Restriction on
DNA Damage</p> |

Session III. Tuesday 9:00-12:00 a.m. Oncogenes and Growth Control and Carcinogenesis

- | | |
|--|---|
| <p>1. Donald Blair, Chairperson
NIH/NCI Laboratory of
Molecular Biology
FCRF Building 469, Room 117
Fredrick, MD 21701-1013
(301) 698-1318</p> | <p>Gene Transfer and the
Isolation of Oncogenes</p> |
| <p>2. Mariano Barbacid
Director, Department of
Molecular Biology
Squibb Institute for Medical Research
P.O. Box 4000
Princeton, N.J. 08543-4000
(301) 698-1278</p> | <p>Carcinogens,
Ras-oncogenes,
and Acoplastic
Development</p> |
| <p>3. Michael Greenberg
Department of Microbiology and
Molecular Genetics
Harvard Medical School
200 Longwood Avenue
Boston, MA 02115</p> | <p>Growth Factor and
Neurotransmitter
Regulation of C-fos
Proto-oncogene
Oxpression</p> |
| <p>4. H. J. Kung
Department of Molecular Biology
and Microbiology
Case Western Reserve
School of Medicine
Cleveland, OH 44106
(216) 368-3655</p> | <p>Retro-viral Insertion
and Transduction:
Making of a Receptor
Oncogene</p> |

Session IV. Tuesday 7:00 - 10:30 p.m. Methyl Deficiency and Biological Systems

1. Lionel A. Poirier, Chairperson
National Center for Toxicological Research
Jefferson, AR 72079
(501) 541-4524
Physiological Methyl Donors in Carcinogenesis
2. Paul M. Newberne
Pathology Department
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118
(617) 534-4524
Perspectives on Lipotropes in Carcinogenesis
3. Robert M. Hoffman
Department of Pediatrics
University of California of San Diego
La Jolla, CA 92093
(619) 534-3907
Cancer, Methionine Metabolism and Transmethylation
4. Francesco Feo
Istituto Di Patologia Generale
Universita Di Sassari
Via P. Manzella 4
07001 Sassari, Italy
011-39-79-21-7434
Relationship Between S-methionine Levels, DNA Methylation and Protooncogene Expression in Regenerating and Precancerous Liver

Session V. Wednesday 9:00 - 12:00 a.m. Methylation of DNA and Gene Expression

1. Judith Christman, Ph.D., Chairperson
Michigan Cancer Research Foundation
110 E. Warren Avenue
Detroit, MI 48201
(313) 833-0710
Methylation of DNA and Gene Expression
2. Dr. Richard Challet
Department of Genetics
Harvard Medical School
45 Shattuck St.
Boston, MA 02115
(617) 732-7553
Experimentally Induced Alterations in Methylation of Specific Genes on Their Expression in Transgenic Animals
3. Dr. Steven Baylin
Oncology Center Research Annex
Johns Hopkins Hospital
424 North Bond Street
Baltimore, MD 21231
(301) 955-8506
Hypermethylation of DNA and Potential Consequences for Human Cancer

- # The Coupling of Hypomethylation and Transcriptional Competence of Immunoglobulin Genes is Developmentally Regulated

Calcium, Cell Proliferation, Differentiation, and Carcinogenesis

- Introduction and Perspectives
- Fundamentals of Calcium Metabolism in Cells
- Calcium, Cell Proliferation and Differentiation
- Nutritional Calcium Stresses
In vitro and in vivo
- Calcium, Other Minerals and Carcinogenesis

Session VII. Thursday 9:00-12:00 a.m. Nutrients and Signal Transduction.

- ## Heterogeneity of Response in the Protein Kinase C Pathway

2. Suresh Joseph
Department of Biochemistry and
Biophysics
University of Pennsylvania
School of Medicine
Philadelphia, PA 19104
(215) 898-8797

Phosphatidylinositol
Turnover and the Mechanism
of IP^a Mediated Calcium
Release

3. Randall R. Reed
Department of Molecular Biology
and Genetics
Johns Hopkins
Room 805-PCTB
725 North Wolfe Street
Baltimore, MD 21205
(301) 955-4631

G-Protein Coupled Cascades
in Signal Transduction
and Olfaction

4. Michael Karin
Department of Pharmacology
M-036, School of Medicine
University of California
San Diego
La Jolla, CA 92093
(619) 534-0872

Regulation of Transcription
by the Protein Kinase C
Pathway

Session VIII. Thursday 7:00-10:30 p.m. Hormones, Hormone Receptors, and
Gene Expression

1. Dr. Jan-ake Gustafsson, Chairperson
Professor and Chairman
Department of Medical Nutrition
Huddinge University Hospital F69
S-141 86 Huddinge, Sweden
011-46-8-774-9207

Mechanisms of GH
effects on liver
cytochrome P-450
isozymes

2. Mathew M. Rechler
Chief, Section on Growth
and Development
Molecular, Cellular and
Nutritional Endocrinology
Branch
NIDDK, NIH, Building 10, Room D-14
Bethesda, MD 20892
(301) 496-2483

Insulin-like growth factor
binding proteins: Molecular
characterization and
biological role

3. Gunnar Norstedt
Center for Biotechnology
Huddinge University Hospital
Karolinska Institute
Huddinge, Sweden

Growth Hormone-(GH)- and
non-GH-dependent regulation
of insulin-like growth
factor expression

Session IX. Friday 9:00 - 12:00 a.m. Vitamins' Trace Elements and Gene Expression

1. Luigi M. DeLuca, Chairperson
Differentiation Control Section
National Cancer Institute
Building 37, Room 3A-17
Bethesda, MD 20892
(301) 496-2698
Modulation of Normal and
Tumor Cell Growth and
Differentiation by Retinoids
2. Peter J. A. Davies
Department of Pharmacology
University of Texas Medical School
P.O. Box 2078
Houston, TX 20708
(713) 792-5904
Developmental Patterns of
Retinoic Acid Regulated Gene
Expression
3. Barry Komm
Department of Biochemistry
University of Arizona College
of Medicine
Tucson, AZ 85721
(602) 626-6033
Influence of Vitamin D on
Specific Gene Expression
4. Marcia D. Linder
Department of Chemistry and
Biochemistry
California State University
Fullerton, CA 92634
(714) 773-2472
Copper Transport and Gene
Expression in Cancer